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DR. LEONARD ON THE DIFFERENT VARIETIES OF DIARRHŒA.

[Continued from page 346.]

(g) Lienteric Diarrhœa is the term given when "the food passes rapidly through the bowels, and is ejected from the rectum undigested and unaltered." It comes on slowly, or it may be the sequence of dysentery or some other flux. It is invariably associated with feeble digestion, as its name imports. There is great irritability of the alimentary canal, as is shown from the vomiting, the increased peristaltic action of the bowels, and the aliments passing out undigested. It is probable that the gastric juice may not be secreted in due quantity, or it may be altered in quality.—*(Good.)* It is a kind of dyspepsia attended with looseness.

The remedies are alteratives, tonics, stimulants, opiates and astringents—as mild mercurials and the alkalies, bark and iron, capsicum, ginger, cantharides, brandy, &c., and some suitable preparation of opium in proper doses. No aliment should be allowed, save that which is digestible, nor should the patient be drenched with any kind of "drinks" that may be said to cure him. Experience has proved that food of an opposite character to that recommended for patients with other forms of diarrhœa is not only admissible, but absolutely necessary in lientery. Feeding the patient, in fact, forms an important part of our treatment. To illustrate this, I may briefly give the history of a few cases.

I was called to see a child of Mr. C., about 2 years of age (August 9th, 1844), who had been for some weeks suffering from lienteria. He was much wasted; he passed many stools every day containing undigested aliment; he vomited more or less; there was paucity of urine, and his feet and legs were swollen. I directed that flannel be worn next to the skin, and counter-irritation be made over the stomach and bowels. I gave him small doses of calomel, lead and opium, until the color of the stools was changed. At first he was nourished with beef-tea, rennet whey, &c. When he acquired sufficient strength, he was carried out into the open air daily. Afterwards he took the muriated tincture of iron, and an infusion of camomile flowers in Holland gin. He then took broiled salt pork and fish freely. The symptoms all began rapidly to improve, and in sixty-seven days he was a healthy, ruddy boy.

"Facts are stubborn things," and no fact is better established, to my mind, than that salt provisions are highly serviceable in lienteria. The patient will not only take such food, but generally is greedy for it, preferring it to anything else. Now, what is the *modus operandi* of these saline aliments? Cullen defines this flux a diarrhœa in which "the aliments are quickly hurried through the body in a nearly undigested state." Gregory says—"The aliment being imperfectly digested, it is sent in a crude and probably *acrid* state to the intestines, the delicate mucous membrane of which it irritates, and thereby occasions purging." "Fernelius attributes the disorder to weakened digestion; Friend, to an obstruction of the intestinal glands, and Fr. Sylvius to an obstruction of the orifice of the lacteals. Actuarius observes, that an inveterate diarrhœa or dysentery most commonly produces the distemper." Are these obstructions and these derangements not sufficient to cause depravity of the gastric juice, and may not the gastric juice be deficient in quantity from the same causes? Under this state of things, the blood is daily and hourly becoming impoverished, and the constitution tottering to decay. What is to be done, if not to restore to the body its wasted elements? I see no other indication, and hence I give alteratives, tonics, &c. But these alone are not sufficient to make up for the great waste that has been sustained; food that can be digested, and nourishment which contains that which will supply the lost *atoms*, must be furnished, or the patient will inevitably sink. Having seen the good effects of salt meats and fish in lienteria, reasoning analogically, I came to the conclusion that the salt increased the serum of the blood, as is the case if injected into the veins of fever and cholera patients, and that the fatty matters were taken up for margarine, oliene, and other compounds of the body. In 1848, I communicated my opinion on this subject to a professor of one of the medical colleges in New York. In reply to my letter, the learned professor says—"Your suggestion as to the *modus operandi* of salt provisions is certainly ingenious, and the analogy with the benefit supposed to have been derived from saline injections into the veins in cholera is striking. Yet more striking is the analogy with the cases of fever, &c., reported years ago by Stevens. But, my dear doctor, you lean upon a broken reed when you ask me a question as to the *modus operandi* of a medicinal agent. Of no part of medical science do I know so little—in no department has there been so little regard to inductive reason. The whole subject is at loose ends, and must be studied over again in the light which modern chemistry has thrown, and is capable of throwing, on physiology and pathology. These opinions, which I have long held, make me exceedingly diffident of my own judgment on this subject. The fact, the great practical fact, that salted meats and fish do good, is well and finally established. As to the *why*, I have thought but little on it—never, indeed, till I received your letter, and all that I can say as to your theory, is, it is ingenious, and as likely to be true as any I know of."

Having nothing but my own experience to sustain me in this doctrine, I have watched carefully, for something more. The circumstance that salt had been used in cholera, and that out of a thousand cases not more than *six per cent*. died of those who had the saline treatment, has at length given me more firmness in my "theory" than I possessed before.

Dr. Stevens gave salt itself (after using saline medicines) in the second stage of cholera, with most wonderful success.—*(Braithwaite's Retrospect, Part XX., page 310.)* The proof lay in the fact, that salt, when injected into the veins, renders the blood serous, and when taken up by the absorbents the operation is similar on the vital fluid. The principle is the same as that of the action of iron in anæmia, in making up the red particles when these have been lost, and, as the popular saying is, "the blood is turned to water." It may be said that there is no analogy between lienteria and cholera. In both diseases the contents of the alimentary canal are poured out to that extent that, if there be no amelioration, the patient dies exhausted. One is an acute disease, the other is chronic; both involve nearly the same structures, and in both the blood is deprived of its original and healthy constituents. And why cannot the fatty and oily parts of meat and fish be also absorbed and digested so as to replenish the body, in the same manner as iron and salt are known to do in similar instances?

I could relate several cases where this kind of *saline* treatment has been successful. One instance was in my own family, the patient a child 2½ years old. He had dysentery most severely, and lienteria came on as a sequel. I had despaired of his recovery; but in this emergency, when he was so feeble as to be scarcely able to lift a hand or speak, I took him into a chaise and carried him a short distance every day. He took salt pork and brandy, and *nothing else*, for many days. I shall never forget with what greediness he seized the first morsel of broiled pork that we gave him. Had he possessed sufficient strength, his voraciousness would have appeared like the ferocity of a hungry beast, so eager was he to take it. He was allowed only a small bit at first, and gradually the quantity was larger. Weak brandy and water was his principal drink. He regained his wonted health in a few weeks.

During my stay upon the isthmus, at Panama, and while in California, I had occasion to treat this complaint. The same plan that is so successful here, is beneficial in those countries. But at the South and West we have the deleterious influence of climate to contend with. In those warm regions a blister over the liver, dressed with mercurial ointment, seemed to do a great deal of good in some cases which I saw, in my own practice and in that of others. In such locations, malaria has more or less to do with all the kinds of bowel complaints which prevail; almost every case of fever, in miasmal districts, is complicated with diarrhœa. Hence we may rationally conclude that bark or quinine will be useful remedies in these affections in such regions. In all places the *regimen must be as strict* and as thoroughly persevered in as in any other form of diarrhœa; the only difference is, experiment and trial have proved that a different sort of aliment is required in lienteria from that which is proper in other pathological conditions where diarrhœa is an attendant symptom.

(h) Fibrous Diarrhœa.—The secretions, in part, consist of *coagulable lymph*, the membranous discharges passing off in the form of tubes, or in flakes which may be intermixed with serum resembling substances expelled from the air-passages in some diseases of the respiratory sys-

tem. I have seen one well-marked instance of this disease. It occurred to a woman who supposed that she had worms, and who took drastic purges and vermifuges. The complaint yielded to a discontinuance of the acrid drugs, a suspension of the cause, conjoined with the use of tonics, sweet oil, rest and low diet. I have witnessed other cases of tubular diarrhœa, wherein the patients supposed that they were expelling a portion of intestine with each evacuation of the bowels. I have never met with anything like obstinacy in this complaint. Dr. Elliotson has seen only three or four cases; and says that, "by the most persevering treatment I have not done any good. I have merely afforded temporary relief."—*(Prac. of Med.)*

I have supposed that the well-known therapeutic action of calomel, when there is a deposit and pouring out of coagulable lymph, would be useful in this disease when the patient is able to bear it. The application of the nitrate of silver to the air-passages in like condition, furnishes us with a hint for its application in the form of pill or injection in this complaint, and we have a right to expect the same good effects from it in this, as in the former variety of affections.

(i) Puerperal Diarrhœa occurs to women in the puerperal state, either before or after child-bearing, and is dependent on that condition. An exciting cause may be found in certain mental emotions, and particularly some debilitating impression, as the fear of death during parturition, or some deep domestic or other trouble. Any violent agitation of the mind will relax the sphincters of some people, and they will have profuse discharges. I am acquainted with a professional gentleman, of no mean respectability and acquirements, who always has a swift motion from the bowels when he is excited, as from viewing one of his patients in imminent danger, or in great distress, and after performing any surgical operation, even one so trivial as the extracting of a tooth. The obstinate diarrhœa which is followed by puerperal aphtha, a disease recognized by Dunglison, Bennet, Guersent, Condie, and other systematic writers as the "nurse's sore mouth," "nursing canker," "puerperal aphthæ," "aphthæ lactantium," &c., may arise from the same causes. There is not only disease of the mouth and fauces, but, also, "at times even to the infra-diaphragmatic portion of the digestive tube." There is also anæmia, anasarca and feeble digestion. The mucous membrane is sometimes reddened and irritated, and studded with aphthous dots throughout the digestive canal; or this tissue is found pale or infiltrated with serous fluid. To manage this complaint successfully, we must first gain ascendancy over our patient's mind, calm and allay her fears, and then prescribe for her. No plan of medication has proved so gratifying in our hands as that of the *ferruginous* treatment. The tinc. ferri chlo. with equal parts of the tinc. cantharides and the tinc. nux vomic., are very beneficial. The sulphate of iron is another excellent remedy. Opium, nitrate of silver, sulphate of zinc, acetate of lead, creosote, quinine and iodine, are all useful as helpers, and adapted to certain cases; but iron and cantharides are our main reliance. The cases which I reported some time ago, under the head of "Aphtha peculiar to Females,"

in this Journal, are illustrative of this treatment.—*(Vid. Boston Med. and Sur. Jour. Sept. 29th*, 1847, *page* 173.)

(j) The *Diarrhœa of Dentition* may be lienteric, partaking of the nature of the complaint called "watery gripes," or it may be bilious, or mucous, or it may assume any other characteristic and may become very formidable, as in cholera *infantum*. It would appear that nature has so arranged it, that during the process of dentition the child is guarded againt plethora by this constant draining which is set up from the bowels. It will be our duty to imitate this example, by the occasional exhibition of some mild laxative, as castor oil, or rhubarb and magnesia, when there is febrile action and a close state of the bowels. The number of daily discharges is at times enormous. Cases are on record where there have been forty or fifty stools in twenty-four hours. But there is danger in such excessive depletion, as it may produce a disease within the cranium opposite to that which is the consequence of plethora, viz., serous effusion. Therefore, we must have control over this diarrhœa, as well as that of other forms. It is to be treated by the same method as that particular species of the complaint may require to which it bears the greatest similarity, whether it be bilious, chylous, or any other flux; only it is to be borne in mind that *teething is a function*, the performance of which is generally accompanied with a lax state of the bowels.

(k) Sanguineous Diarrhœa is a term I shall make use of at this time merely for convenience sake, and beg the liberty to use it so as to comprehend all those varieties of bowel affections in which occur frequent stools of a hemorrhagic character, yet intermingled with more or less fæcal, mucous or serous matter, as well as those which are only slightly tinged with blood. Simple sanguineous flux is the consequence of a congestive condition of the mucous membrane, and is commonly soon relieved by low diet, a laxative followed by anodyne doses of Dover's powder. When it does not yield to these means, leeches should be applied to the belly, and acetate of lead added to the prescription. The sedative and astringent properties of lead render it a most desirable agent in all sanguineous fluxes. In Panama and at Sacramento I employed it in such cases, and in dysentery, with the happiest results.

But this kind of disorder may be attended by inflammation as well as congestion, and then we have the several diseases styled enteritis, ileitis, and colitis. Whatever we christen the complaint, we are to be governed by four leading indications in its management: viz., *first*, to relieve and overcome congestion and inflammation; *second*, to remove all acrid substances from the digestive canal; *third*, to improve the secretions; *fourth*, we must institute a proper regimen.

There may be cases where general bloodletting is required to fulfil the first indication, but I have never seen one. Leeches may often prove of service, and so with evaporating lotions. A dose of castor oil or Epsom salts will answer the second indication; but cathartic and laxative medicines are too much used, though seldom called for more than once or twice in these affections. If emetics are ever to be administered, it would be for the purpose of discharging crude or acrid matter from the stomach. Third, we give mercurials, ipecac., opium, &c. Fourth, we must adopt the same course as in the first stages of active diarrhœa ; and, *lastly*, we employ direct medication, as in the use of the nitrate of silver, the sulphate of zinc, &c.

The chronic varieties of these affections are to be treated upon the same principles as other chronic diarrhœa. Dr. Stokes says—"You will see, in the various systematic treatises on the practice of physic, separate descriptions of the affections of this portion of the digestive tube. You will find diarrhœa in one chapter and dysentery in another, and you will observe that a great deal of ingenuity has been expended in forming nosological differences between these affections. I fear that much that has been written respecting them is rather calculated to puzzle and mislead the student than to inform him. *Viewed anatomically, there is no essential difference.* You may for every practical purpose place them in the same class, and consider them the result of the same morbid condition of the same part, namely, an inflammation of the lower portion of the digestive tube."—*(Stokes on Dysentery.)*

Some consider dysentery distinctly from other bowel complaints. Some consider it contagious, and that it occurs but once during a person's life. Some forms of dysentery may become infectious ; but that character will not alter the nature of the disease, or render it a fever any more than it would malignant cholera.

Ergot, strychnine, and the nitric acid, have been used in these affections. Mr. Grevis, "after using the ordinary remedies in the treatment of dysentery, without any benefit to his patient, resolved upon giving the ergot of rye, in conjunction with tinc. of iron," which he did with perfect success.—*(See Braithwaite's Retrospect, Part XIV., p.* 87.)

[To be concluded next week.]

DR. WARREN'S VALEDICTORY ADDRESS.

[The following pages are taken in a great measure from a report of Dr. Warren's Valedictory Address, published during the session of the American Medical Association at Cincinnati. The additions from other sources are intended to supply deficiencies.]

The President, in opening his valedictory, an extempore address, said it was a subject of congratulation to the Association to find themselves in this great city of the West. From an early period, those who occupied the shores of the Atlantic, contemplated the rising glory of this part of the country with the deepest interest ; and now, recollecting the period when the early settlers passed over the mountains and rivers, and had to contend with all the tribulations of a savage war, it was especially delightful to survey the peculiar advantages distinguishing this peaceful, happy and rich country, while they were engaged in communion with their brethren of the West on the interests of a great and useful profession. Scattered over an immense region of country, their efforts hitherto, in the improvement of medical science, and the advancement of other objects contemplated by the Association, were but feeble ; but now, embracing within their organization the representatives of this whole nation, they might by a united force, employed with harmonious and judicious action, expect important benefits to the profession, and, what was above all, to their country. It was one of their great advantages, as it was of all other associations based upon similar principles, to bring together the representatives of different and distant regions—people who, far apart from each other, conceived that they had different feelings, interests and wishes; but who, when brought together, found that they were the same people, had the same interests, and were *one*. He should take that opportunity of congratulating those individuals who, with a judicious forethought, devised the plan of that Association and afterwards bestowed their utmost efforts to guide and protect it.

Their first business, now, would be to re-organize the Society. Custom had established the practice of rotation in office; it was a practice which harmonized with all the institutions of the country, and was one in the expediency of which he fully concurred—affording them, as it did, an opportunity of selecting different individuals from different parts of the country, and thus, of interesting, successively, the whole.

He [Dr. Warren] looked back upon his predecessors with a sentiment of high respect—feeling when he occupied their place, how little he was able to follow in their steps; but his efforts had been directed with a sincere disposition to promote the best interests of the Association. But where, he asked, was he whom he expected to salute as his successor in office (the late Professor Harrison)? Endowed with qualities which belonged to the gentleman and the scholar, the loss of this humane and active practitioner was great to the Association and to the public. When they looked around they found his chair vacant; he was not there. He recognized, however, near to him one of the distinguished sages of the West (Dr. Caldwell), and he hailed his presence at that meeting, and congratulated him on having vigor and strength to appear in that Association, where he might rejoice in witnessing the proofs of his labors among so many gentlemen, whose talents had been developed under his tuition. He looked again—but in vain—for the veteran medical author of this great State, whom he imagined he still saw engaged pouring out the fruits of his observation and experience in all the sciences, collateral to the medical art—few could compare with him in the number, variety and importance of his labors.

It was his [Dr. Warren's] duty on this occasion to call the attention of the Association to various subjects of business. Since he arrived in this city he had had the honor of receiving a letter from the distinguished Secretary of the Smithsonian Institute, at Washington, requesting the coöperation of the Association in the collection of medical statistics of the country, and remarking, that if they should decide to hold one of their conventions in the city of Washington, the rooms of the Smithsonian Institute should be opened to their reception. It was also desired that the Association should be informed that a foreign gentleman had made applications to various individuals in this country, for the purpose of collecting statistics on an important physiological phenomenon, and it was conceived desirable that application should be made to engage their interest in the matter. He would suggest, also, that there should be a reconsideration of the privileges of permanent members, as a degree of dissatisfaction still existed in the minds of several members of the Association, in regard to the fact, that members elected by the States, and serving here one season, were not afterwards qualified or allowed to vote as members of the Association.

While he should feel happy to induct these new labors of the Society, he heartily congratulated the Association on the good it had already accomplished—a collection of documents, prepared by the most able of the profession, being annually poured forth, which would serve as most important materials for a medical history of the country. The Association had also obtained an influence on education, and in the conduct of the medical schools in some parts of the Union, which would undoubtedly extend itself gradually throughout the whole of the country. Finally, he had to congratulate them on the important impression that had been made by developing the extraordinary sophistications of those drugs and medicines, on which they relied for the restoration of the health of their patients. The labors in connection with this subject would be continued. The Association, at its last meeting, directed him to address two members in each State represented, to form a new committee for the purpose of investigating the sophistications of medicines introduced into the country, or such as having been introduced, had been poisoned afterwards. He had also, by direction of the Association, forwarded a letter to the committee on pharmacy, of the city of Philadelphia, encouraging them to proceed in a work they had already commenced, of preparing simple rules to enable the public to detect the sophistications of the most common articles of medicine.

As he might consider himself on the verge of his professional life, and about to quit the last professional office that it would probably be his lot to occupy, he naturally turned to inquire whether, during the long career of half a century, he could gather anything which might be useful or interesting to those who should come after him. The learned President then proceeded to remark that many vast changes had taken place in the principles and practice of the healing art, within the period he had named, and beginning with Hunter at the close of the last century, and Bichat at the commencement of this, and considering them as having developed the great principles of the medical art, he proceeded then to trace the steps of their disciples (mentioning many prominent names), until that period of improvement was attained which fifty years ago no man could have anticipated. After enumerating the foreign luminaries of the profession, the President mentioned the American physicians—Physick, Dorsey and Randolph, of Philadelphia; Hosack and Post, of New York; Smith, of New Haven; Simmons, of South Carolina—in regard to many of whom he stated he could give sketches and state facts that might interest the audience. But time did not permit, and he should for the present pass over all these and direct their notice to some of the most important improvements that had enlightened and characterized the last half century. Among these were the microscope, lithotrity, tenotomy, the introduction of cold water and of ether; and even of these he should be obliged on the present occasion to confine himself to the two last.

Cold Water.—The introduction of cold water into the practice of surgery is one of the great ameliorations of the present day. In the early part of my practice cold water was not allowed to touch a wound, a fracture or an inflamed part. But since hydropathy has become fashionable, the practice has run the other way with an impetuosity which is great, indeed, though not very wonderful. I say not very wonderful, meaning to intimate that there is a propensity in our profession to run into the extreme use of any new method, which is brought to their notice under favorable circumstances. In the course of my time I have seen a great variety of fashions in surgery and in medicine. A large part of these have passed out of my recollection. But I do remember that at one time most diseases were attacked by mercurials; not only general but local; inflammations and fevers; affections acute and chronic, syphilitic and scrofulous; in short, nearly all diseases, all ages, both sexes, were invaded by this potent mineral. A medical man would not have dared to go into consultation with the statement that his patient had taken no calomel in a case of typhoid fever; and now the distinguished and accurate Louis has shown that people may get well of fever without medicine, and that, the more simple their treatment the more likely they are to recover. In other complaints also it is now used in a very limited manner, or altogether laid aside. We are therefore fairly exonerated from the responsibility, not to say culpability, of employing an article in febrile cases which may bring on the most horrid and irremediable consequences. Let me not be understood to say that no medical treatment is desirable in this disease. On the contrary, patients with fever require to be guided at every step and turn to prevent the running into dangers, against which, indeed, nature would warn, but into which the folly of friends would perpetually urge them.

How many other articles I might mention, the use of which has been carried to excess by a blind enthusiasm. We remember digitalis, phytolacca, bismuth, prussic acid, preparations of iodine, and, finally, shall I say it, cod-liver oil.* But here I must pause, for I would not venture to oppose myself to the current which now threatens to sweep over the whole country. My conclusion on this topic is, that a judicious practitioner should not allow himself to be drawn away by every new remedy; that he should carefully watch its effects, recollect that the specific power of medicine is limited, that a thousand medicines are good, each in its place, but that there is none that will cure every disease.

We must now return to the subject of cold water. When we see there is such a never-ending disposition to follow novelties in medical practice, we cannot be surprised that it should have been put in operation by so wonderful an agent as this. For many years I have employed it with great advantage in inflammations external and internal. Externally it has a better effect than any other remedy, except the abstraction of blood. It may be employed in two or three different ways. First, as an evaporant. One or two layers of cloth, dipped in cold water and laid on the inflamed part, produce rapid abstraction of the heat and diminution of all the phenomena of inflammation. Second, by douche —that is, by an affusion of water in a small or large stream. This, again, is a powerful mode of diminishing the temperature of a part. Third, warm water may be used as a cataplasm. For this purpose, six or eight layers of cloth are made to imbibe warm water. These should be laid on the inflamed part, and covered by an impervious cloth. Internally* cold water may be employed for most inflammations, especially inflammation of the throat, fauces, stomach, intestines large and small, by draught and injection. In typhoid fever, for example, it will probably be more beneficial, after the first evacuation, than any other remedy, and may, I apprehend, be used during a considerable part of the complaint as a substitute for all others.

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* The use of cod-liver oil in phthisis has been judiciously explained by the distinguished French physician Bureaud Riofrey, now established as a medical practitioner in the city of New York.

I cannot proceed further in considering the virtues of cold water, without expressing my regret that a practice so valuable for health, for cleanliness, for comfort, and for the cure of disease, should have become affiliated in this country, in an extraordinary manner, with one of the most remarkable medical fictions that has been produced by the present or any former generation.

Ether.—Last, though not least, in the march of improvement, comes the use of ether for the prevention of pain. Three years have now enabled us to see its operation in more than fifteen hundred cases; and so far as our experience has gone, its influence has been agreeable, efficacious and safe. The benefits to humanity arising from the introduction of ether into surgery, have been more decided. Its security has been more firmly established. The cases in which it is unnecessary to use it have been better defined, and it has been pretty well settled, by the opinion of surgeons, that it is unwise to resort to its use in small operations, where the patient, by a moderate effort, can support the infliction. In a published account of an anniversary meeting of the French Academy of Sciences, a distinguished surgeon is stated to have said that ether in surgical operations was an inconvenience, in consequence of the involuntary agitation of the patient during its influence. We have indeed known inconvenience to arise from the agitation of a patient when partially etherized. But when perfectly affected by this narcotic agent, there is a delightful state of repose which protects him from the agonies of the knife, and allows the operator to pass tranquilly through the most delicate dissections. If there is any truth in operative surgery which experience enables us to maintain in an unqualified manner, it is that the surgical application of ether is one of the greatest acquisitions, provided it be properly administered; but when applied in a parsimonious or injudicious manner, instead of a blessing it becomes a curse.

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* Bruce, the traveller, states that in some bad fevers on the borders of the Red Sea, an important part of the treatment consists in a very free internal use of cold water and frequent affusion of it externally. His words are, "If the patient survives till the fifth day, he very often recovers by drinking water only, and throwing a quantity of cold water upon him, even in his bed, where he is permitted to lie, without attempting to make him dry or change his bed till another deluge adds to the first. * * * * * * * Small doses of bark must be frequently repeated, and perfect abstinence observed, unless from copious draughts of cold water."—*Bruce's Travels, Vol. III., pp.* 360-1. *Dublin,* 1791.

We use it copiously with a large sponge until the patient is perfectly unconscious, and if any rigidity of the muscles of the jaw or any other part is observed, its use is pursued until this appearance subsides. When the operation is a little prolonged, the sponge is continued until near its termination. But it is absolutely necessary during the whole application, whether short or long, that the state of the patient's pulse, respiration and countenance should be most carefully observed by an assistant appointed for the purpose. If there is any appearance of collapse, etherization must be suspended and proper means applied to revive the languishing vitality. Another objection said to have been made against the use of ether, is the waste of time it occasions. This objection may be a valid one for those who estimate their time as of more importance than the sufferings of their fellow men. But I presume there are few operators in this country who would require a reply to such an objection.

A great deal has been said, and much more might be said, on the physiological cause of the suspension of sensibility under the use of ether. On this subject I will only remark, that, so far as my observation has extended, ether in some way prevents the oxygenation of the blood, and unoxygenated blood, we know, thrown upon the brain, suspends sensibility in a degree proportioned to the degree of the privation of oxygen. In other words, the insensibility of etherization is produced by the application of unoxygenated blood to the brain. In support of this remark, I would state that in those cases where the effects of etherization have been most powerful, that is, where there have been severe spasms followed by irregular pulsation, respiration and insensibility, the blood issuing from the arteries during cutting operations has been of a venous color, so that an arterial jet would be mistaken for a venous jet, and the degree of absence of arterial color has been proportioned generally to the violence of the symptoms. In a considerable number of fatal chloroform cases, however, death has occurred under a very slight and momentary application. Various hypotheses may be adopted to explain this sudden effect of chloroform, none of them, indeed, very satisfactory; but that which is most so, seems to be, that this substance inhaled into the lungs and conveyed to the blood acts as a violent poison.

An alarm has been excited by suppositious dangers in the practice of ether. These dangers do not belong to ether, but should be appropriated to chloroform. The substitution of this new and more powerful narcotic has caused the death, not indeed of a great number of individuals, but great for the practitioners by whose hands it has been administered, and for the patients who have suffered. Those which have been made known to the public have now increased till they amount to about twenty. One of them, and one of the earliest, you had an opportunity to witness in this very city, in February, 1848. A recent case occurred in France, in which the quantity used was very small, very carefully administered by a judicious physician, and which proved fatal almost instantaneously. Chloroform had been inhaled by the same patient before. It must be admitted, however, that, since a warning voice has been raised, the deaths from chloroform have not been so numerous in the same period of time as before. How any medical man, knowing that death has sometimes occurred from the use of chloroform, and having in his hands a sufficiently active agent in ether, can expose his patient to the increased risk of a fatal consequence, without necessity, I do not understand.

At a meeting of this Association in Baltimore, year before last, the subject having been mentioned, I took occasion to state that strong chloric ether would be found an agreeable substitute for chloroform and an auxiliary to sulphuric ether. I have used it with very little exception from that time to this, more than two years, and the result of the whole of my practice has been, that it has distinct advantages over sulphuric ether and chloroform—no unfavorable instance of its application having ever occurred within my knowledge, although the whole number of cases in which I have used it cannot be less than five hundred. The only objection I have to it is, that when freely poured upon the face, it is apt to cause smarting and soreness. This is easily obviated by covering the skin with oil or any unctuous substance, or by placing a piece of etherized sponge in a towel rolled in a conical form, through which the patient inhales without bringing the sponge into contact with the skin. Chloric ether has the following advantages. It is more agreeable than sulphuric ether, less apt to cause headache in the patient and those around, produces a salutary nausea, and does not leave behind the permanent dead smell of sulphuric ether.

The agony of death is a fair subject for the influence of ether. This supposed agony, in the greater number of cases, perhaps, is a creature of the imagination, conjured up by fear. Nature, like a kind mother, has presented the phenomena of death with such accompaniments as she thinks necessary to deter us from resorting to it by our own act. But while the entrance to the dark passage appears frightful, as we pass on it becomes less and less distressing, till it terminates gently in insensibility. Some instances there are, in which there is real suffering. In these we have an invaluable friend in ether. And when the mortal strife is so far advanced as to leave no hope nor chance of recovery, the duty of a physician is to interpose the means by which we may be softly and agreeably conducted through the final moment. This practice I adopted many years before ether was introduced into surgery, and I have followed it lately, though with great caution, and never without the clear knowledge and full assent of friends.

The transient review we have taken of the progress of surgery during the last half century, appears very satisfactory. Improvements of a high order have shown themselves within this period, some of which are scarcely less important than the discovery of the circulation and of vaccination, in the two preceding centuries. This is the more observable, from the fact that the period of brilliant discovery has not generally been one of ordinary improvement; while in the last half century, the great advances we have noticed have coincided with others in almost every department of surgery. Consider, for example, how much more rational and successful is the treatment of simple wounds, of fractures, of dislocations, of wounds of arteries, of syphilis, of diseases of the eye.

When we add to these the wonderful progress in the application of physical science to practical purposes, and the consequent improvements in the transmission and diffusion of knowledge; the great discoveries in natural history, the revolution in geology and palæontology, the popularization of learning by lectures; the temperance reform, in so great a measure attributable to the medical profession, with the consequent amelioration of the morals of one part of the community and of the health and happiness of the whole, we have great reason to thank the Author of all good that we are allowed to live in such favored times. But we should not permit these reflections, as we are very apt to do, to puff us up with a foolish pride in our State, our country, or the age in which we live. We should rather look about us, and see how little we have done ourselves, how much remains to be done, and what are the particular demands on our future efforts. We ought also to remember, while we are congratulating ourselves on the recent advances in knowledge, that there is a vast mass of riches on the shelves of our libraries, which, though buried in the novelties of the present time, is capable of furnishing learning not less valuable than that for the possession of which we are so highly applauding ourselves.

This great Association, representing every part of the country, has the power of influencing the cultivation of these desirable objects; and I will now take my leave of it with the most fervent aspirations that it may long continue to promulgate doctrines which will aid the progress of science and civilization, further the means of relief for the sick and suffering, and elevate, as far as possible, the art of healing to the rank of a fixed and positive science, so that when another half century has rolled away and another generation shall convene in this city, they shall be willing to pay the same tribute of respect to the members of this Association which we so gladly accord to the distinguished men of the past.

The address at the conclusion was much applauded by the audience—visiters then retiring with a view to the better concentration of the members of the society.

THE PROPOSED CITY HOSPITAL—ONCE MORE.

To the Editor of the Boston Medical and Surgical Journal.

Sir,—The "Reply to Medicus," in the Journal of the 5th inst., may seem to require some notice from me. I will therefore briefly rejoin; not, indeed, principally to call the printer to account, but to extricate my unknown friend from an error into which, under the weight of his dictionary, he has stumbled in his eagerness to seize upon, and convert to his own use, a supposed unguarded expression of mine.

My statement, that the Massachusetts General Hospital was not designed for a pauper asylum, was not unguardedly made. I reiterate it, merely observing that I employ the term *pauper* in its ordinary sense, as when applied to those who are the proper subjects for alms-house care, and not as equivalent always to *poor person.* For whereas all paupers are poor persons, the reverse is not true, that all poor persons are paupers—Dr. Johnson to the contrary notwithstanding.

By no admission of mine, therefore, does it appear that there is no provision for the poor in the Massachusetts General Hospital. At any rate, the fact that a good proportion of the cases there under treatment, will always be found to belong to this class, cannot be controverted by a mere quibble respecting the exact significance of a word. It is a matter of surprise to me that your correspondent, with his "four or five years pretty close intimacy with the medical officers and *patients* of the Hospital," can assert as a fact, what his own observation during this period must have shown him to be untrue. I do not consider myself called upon to notice the tone or matter of his subsequent remarks in this connection. The character of the Massachusetts General Hospital for excellence of management, and general usefulness as a charitable institution, is too generally admitted and appreciated, to require any attempt on my part to set it forth more clearly.

And now, Mr. Editor, what point has your correspondent established in proof that a new city hospital is needed? The whole tenor of his communication, he says, has been to show that the Massachusetts Hospital is not a place for the poor. He might as well have attempted to show that the Hospital itself is not in existence, and in this way have thrown it out of the question. But, beyond this, his dictionary arrests his progress to the conclusion, that "there is no *hospital* in the city for the poor," for at South Boston "*a place for the reception of the sick or poor*" may be found. There *are* hospital accommodations in Boston for those "afflicted with acute disease and the crime of poverty," and your correspondent ventures no farther than to *think* there is a demand for more. He has volunteered to advocate a measure, of the necessity or expediency of which, he does not appear himself to be fully convinced.

In the absence, thus far, of any well-sustained and valid reasoning for this movement, advanced by its friends, I have naturally been led to look elsewhere for some sufficient motive, which may have originated this project. If that to which I have alluded in my former communication, be not the true one, then some indications in certain quarters, which have attracted my attention, are without any satisfactory explanation. No considerations of a personal character have led me to adopt the views I entertain upon this subject; and certainly I occupy no position in which I could be possibly influenced by "the fear of a rival institution." MEDICUS.

CHOLERA—ITS CAUSE AND PREVENTION.

[Communicated for the Boston Med. and Surg. Journal.]

IN looking over a file of English newspapers, I observed the result of some experiments as to the nature of the cholera, by Mr. Brittan, Drs. Budd, Snow, &c. They have discovered that this plague consists of poisonous animalculæ, which find their way into the bowels. This, if true, is worthy of particular notice, as it may be the means of leading to further discoveries. I am led to suppose that if the means of prevention are ever discovered, they will be found to be extremely simple. Nevertheless, as it is every person's duty to do all in his power to discover a method of safety, I beg leave to suggest the following, as a theory worthy of some consideration :—

1st. Where does the cholera spring from, or in what place, and how is it propagated?

2d. By what means is it brought to exercise such an influence?

3d. How does it find its way into the human body?

4th. What is the period of its existence, and duration of the plague?

5th. Is there a preventive?

With a few observations on these points, I shall leave the subject to others, who have more time and opportunity, to bring them out as facts or otherwise.

To the first question, I reply, that this plague is brought forth from the deposits of human excrements, which are found in out-houses or elsewhere.

To the second—A certain temperature in the weather, in the spring or in the summer season, for a definite time. It may be weather (with very little or with much rain, or with no rain at all), acting on these deposits, until the whole mass is changed from its primary or common state to another, or what I would, for the present, call *the pestilential state.* Yet it may be possible that the stale deposits will never become cholera until an alteration is effected, by fresh discharges. Then the effluvia arising from the old may rush rapidly to the new, so that in a very short time, both may become so, that is, it may require the joint action of both to effect the change. At all events, the effluvia of the one must greatly differ from that of the other. It is also possible, that the excrements of one individual may be more readily pestilential than those of another. Besides this, a large quantity of a certain kind of food may assist to bring these places to such a state.

3d. Evacuating the bowels over the deposits which are contained in out-houses, during the pestilential state, will supply an answer to this question. The poison during this process adheres to the excretions which may remain on the exterior parts, and from thence gains an entrance to the bowels. Seamen on landing, and country people on arriving in towns, are more susceptible than the inhabitants of a town, for the former leave a pure air, and were not accustomed to exposing and inuring themselves over the old deposits, as is the case with those residing in town, who from their constant habit of exposure to the effluvia, have their bodies tempered to a certain degree in such a way as to resist its baneful influence. When seamen expose themselves, even before the deposits assume the pestilential state, they are seized with a species of cholera, perhaps as deadly to them, as though the disease really existed in its full force, while at the same time the residents in the town are free from it. In this way its first appearance may be accounted for, although, should the weather not be such as will readily perpetuate the disease, the poison may very soon disappear for that season.

4th. Cholera will prevail while these deposits foster the pestilential state. These places must undergo a third change—the poison must become exhausted, and then the plague will cease. This change to the exhausted state may be compared to a fire, which will burn while there is a supply of fuel, but no longer. Yet the poison may exist longer in one vicinity than in another, on account of the situation of the out-houses. Some are more exposed to the influence of the weather than others, and consequently a longer time must elapse before the whole will become pestilential. Besides this, the trader who is seized with the complaint just prior to his journey, and is laid up in a few days or hours afterwards, will help to bring these places into a state of impurity—his excrements will be thrown into the out-house, and so poison the whole mass, and from this cause the disease will be communicated to another, and so on, making but slow progress, until the time arrives when the weather will exert its full influence. From these considerations it would appear that the period of its duration, as well as of its greatest severity, depends upon circumstances.

5th. If this theory be correct, several preventives are at hand, one of which may be considered quite safe and practicable, viz. 1st. Instead of having recourse to an out-house, let a clean vessel be used half filled with water, and the parts afterwards well washed and dried. The whole process should be accomplished without any unnecessary delay, because it is not yet ascertained in what period of time the attack commences. The same cleanliness should be observed after the expulsion of wind. 2d. The chemist may discover some substance—say, for example, unslaked lime stone—which, when added to the contents of out-houses during the first or primary state, may change them to a second state, and thus counteract the influence of the weather. 3d. By taking away out-houses and every similar place, and in their stead introducing a washing system, which will prevent a particle of such contents remaining one moment, the whole being driven into the sea. The least consideration will convince any person, that the state of a town with several thousand inhabitants, and perhaps hundreds of out-houses emitting noxious effluvia, must be vastly unwholesome, when compared with a town enjoying pure air in every respect. A town destitute of those stationary places of deposit cannot, upon this theory, be visited with cholera. Nor is it probable that the pestilence would be communicated from one person to another, although lodging together in the same apartments, and more particularly so, if the prescribed washing, &c., be observed.

This destructive plague may be the forerunner of some great change in towns and villages. It would appear as if it were to become a powerful means of compelling the inhabitants to adopt a better system of cleanliness. It has already produced this effect in London. It is true that some places in many respects are thoroughly clean, yet it would appear that the above-named mode of cleansing is as necessary as any other.

June, 1850. W. M.

[It is believed that the experiments, last year, of Mr. Brittan and others, did not prove the existence of any peculiar animalculæ in the excretions of cholera patients. The suggestions of our correspondent, however, are valuable as enforcing the general importance of cleanliness in large cities, especially in a matter so unavoidably connected with public health as that of the existing privies in such places.—Ed.]

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, JUNE 19, 1850.

Treatment of Burns.—Perhaps there is no accident in the catalogue of surgery, wherein greater discrepancy of opinion exists regarding the best treatment, in the primary condition, than that of burns. One succeeds best by the antiphlogistic, another by the stimulating plan—while some contend for a medium between the two. It appears to us, that there can be but one principle upon which should be based the primary treatment of burns, and that is the vital one of inflammation. It is most emphatically inflammation, and of course attended with its results, either in a low or high degree, according as the parts are injured. A simple burn, or that considered of the first degree, wherein there is slight redness of the skin, will readily resolve itself, like unto all simple inflammations, without any, or the mildest and most simple treatment. But when an extensive surface is invaded, and the parts beneath are deeply involved, then the matter is entirely different, and requires a prompt and active treatment. The location of the lesion has something to do in our management and treatment of such injuries; for burns upon the head, face, neck, thorax and abdomen, produce greater constitutional symptoms and are more dangerous to life than the same extent of injured surface upon the extremities. The indication, then, required in our management, is, to lessen the pain, and make the inflammatory process as little destructive as possible; and if it cannot be prevented, then, of course, to promote the separation of the dead parts from the living, in a manner best calculated for the comfort and safety of the patient. We have lately had an extensive burn under our care, in the case of a lady, who, while attempting to give what is called a *rum sweat* to another lady, had her own dress take fire from the burning alcohol, nearly all of which was consumed upon her body before any one could render her the least assistance. We were upon the spot within ten minutes after the accident, and found the patient in a very bad condition. Both arms, from the elbows to the top of the shoulder, were much burned; also the left side, up to the axilla, and on to the top of the thorax. There were many kind friends present; some recommending most of the popular quack remedies of the day, while others were for the usual domestic remedies, some of them quite rational. Linen cloths were dipped in alcohol and water, and the burn was dressed with them. They were not suffered to be removed for twenty hours, and during this time they were kept thoroughly saturated with the cold water and alcohol; at the commencement, equal parts of each, but subsequently two thirds of alcohol to one of water. The patient was relieved from pain upon the first application, and would have passed the time in a very comfortable manner, had she not suffered from the nervous excitement produced by the accident and the usual constitutional symptoms attendant upon such an extensive injury. The subsequent treatment has been to leave the parts undressed, or simply smearing them over with gum water. On the sixth day (at the time of this notice) there is no appearance of sloughing, and the patient has rallied and is very comfortable. This plan is recommended by Mr. Kentish; and the simplicity of the dressings, together with the comfort that is afforded the patient, should be sufficient inducements for every practitioner to make use of it without any prejudice.

New York State Homœopathic Convention.—Among the transactions of this august assembly, at their late meeting in Albany, was the adoption of a Constitution, which is to govern them, when in and out of conclave. The preamble is as follows:—"We, the subscribers, physicians, residing in the State of New York, *believing* the law propounded by Hahnemann, '*similia similibus curantur,*' to be a fundamental truth in medicine, do agree to the following constitution," &c.—*Adopted without amendment.* We shall expect great doings in the Empire State among these innovators of medical science. Their flag is raised, and is given to the breeze; and the fact of their organization, it is supposed, will be wafted to the four parts of the globe. If any one can believe the mere doing of nothing *to be a science*, we certainly have nothing to say to such, farther than to advise the reading of Hahnemann on the peculiar and active properties of *gold* in certain diseases. He says, "after triturating *one grain of gold,* with ninety-nine grains of *sugar of milk*, and continuing this trituration up to the *twelfth potency*, the remedial virtues of gold become roused to such an extent, that a man who was suffering *with horrible melancholy*, and who was impelled by intolerable anguish to take his life, needs but to *smell for a few moments* of such a preparation of gold, in order to recover his cheerfulness and *love of life!*"

BIBLIOGRAPHICAL NOTICES.

"*The Philosophy of Electrical Psychology*—In a course of nine lectures, by John Bovee Dods." Fowlers & Wells, New York, 1850. Pp. 168. —It appears, from the author's introduction, that he was called upon by several distinguished members of Congress to deliver a course of lectures in Washington City, upon his favorite and original subject, "Electrical Psychology." The call was signed by such honorable gentlemen as Messrs. Jones, Hale, Clay, Rusk, Houston, Foote, and Daniel Webster. On the 16th of February the lectures were delivered in the House of Representatives. They are now published, and we have read them attentively, with the hope of becoming much informed upon the new Philosophy of Electrical Psychology; but when we came to the 59th page, and read the following paragraph, we must confess our astonishment was great. In speaking of the circulation of the blood, the doctor says he differs from physiologists:—"I do not believe that the heart circulates the blood at all, either on the hydraulic or any other principle." Yet the doctor has that happy way, in lecturing to an audience not supposed fully to understand the laws of life, that forcibly impresses them that he is right, and *every body else* wrong. He comes to his own conclusions, and these conclusions must be right ones, for there are none to gainsay them. Every thing with him is electrical; and it would not be at all surprising if he should next endeavor to make people believe they are really galvanic batteries. The doctor, certainly, has adopted a style that would please a reader or enchain the attention of an audience. There is much that is beautiful in the lectures, and the time would not be uselessly spent in perusing them. The work is got up in that good style characteristic of the publishing house of the Messrs. Fowlers & Co.

Diseases of the Uterus.—"A Practical Treatise on Inflammation of the Uterus and its Appendages; and on Ulceration and Induration of the Neck of the Uterus. By James Henry Bennet, M.D., Member of the Royal College of Physicians, London. Philadelphia, Lea & Blanchard: Boston, Ticknor & Fields." This is a most excellent and valuable treatise upon those diseases of the womb and its appendages, which have heretofore been considered obscure. Dr. Bennet has here laid down, in a most lucid manner, the principles by which these troublesome affections may readily be distinguished, and properly treated. In the Appendix is the report of three hundred cases, which, being arranged in tabular form, are very convenient for reference. It is a work that should be in the hands of every practitioner: it is authority upon which reliance can be placed, and we sincerely hope that it will meet with the demand that a work of its character merits.

Dr. Carpenter's Prize Essay.—"On the Use and Abuse of Alcoholic Liquors in Health and Disease. By William B. Carpenter, M.D., F.R.S., F.G.S., Author of the Principles of Human Physiology, &c. &c. Philadelphia, Lea & Blanchard, Publishers: Boston, Ticknor & Fields." A prize of one hundred guineas was offered by some philanthropic individual for the best essay "upon the use and abuse of alcoholic liquors in health and disease." There were fifteen essays sent to the committee of the donor, for their examination and adjudication, and they awarded the prize to Dr. Carpenter, his essay being considered the best. It is carefully written, and cannot fail of accomplishing much good. A work emanating from such high authority, and sanctioned, too, by some of the most eminent of the profession in Europe, must needs make an impression upon those who are in the habitual use of alcoholic liquors. When legal and moral suasion fails in accomplishing its purposes, an exposition like Dr. Carpenter's sometimes would achieve the victory; for *no one* would willingly run the risk of being a drunkard, after reading his account of the effects of alcohol on animal tissues. We hope the work will be extensively circulated; for it is only by the dissemination of *such truths*, that a good object, begun, can be successfully carried through.

Medical Miscellany.—M. Guy Lussac, the distinguished French chemist and aeronaut, died in Paris on the 9th of May last.—Among the passengers by the barque Eagle, which arrived here last week from Newfoundland, was a man named Michael Mulloy, at the advanced age of *one hundred and three years.* He enjoys fine health, and says he never lost a night's rest from sickness in his life. He walks with firm step, and can see to read the finest print without the aid of glasses.—There appears to be much imposition practised upon the people by the uroscopian doctors in North Carolina, as well as in some of the Western States.—The medical faculty of Philadelphia are divided in opinion respecting the healthfulness of watering the streets of cities in summer. Dr. Samuel Jackson maintains that the practice is injurious to health. Moist warm air is doubtless less healthy than dry, but in wide and airy streets the sprinkling generally practised we should not consider sufficient to make the air injuriously damp.—Application was made, last week, to the full bench of Judges of the Supreme Court in this city, for a new trial in the case of Dr. Webster. A decision has not yet (Monday) been delivered.—Dr. Wm. Prout, the well-known writer on Animal Chemistry, died lately in London at an advanced age.—Clinical lectures are now given at the Hanwell Lunatic Asylum, England, and are open to any members of the profession.

To CORRESPONDENTS.—Papers for publication are on file from Drs. Leonard, Williams, Munson, and Cato.

DIED,—At San Francisco, April 4th, Dr. I. T. E. Gage, of New Bedford.—At Clinton, N. Y., Dr. Benjamin W. Dwight, aged 70 years.

Deaths in Boston—for the week ending Saturday noon, June 15th, 76.—Males, 38—females, 38. Inflammation of bowels, 3—disease of brain, 1—congestion of brain, 1—consumption, 9—convulsions, 6—cholera morbus, 1—croup, 3—dropsy, 4—dropsy of brain, 2—erysipelas, 1—typhus fever, 1—typhoid fever, 1—scarlet fever, 2—lung fever, 3—gangrene, 1—hooping cough, 3—disease of heart, 1—infantile diseases, 4—inflammation of lungs, 2—disease of liver, 2—marasmus, 1—measles, 1—old age, 1—palsy, 2—pleurisy, 1—disease of spine, 1—smallpox, 13—suicide, 1—teething, 1—tumor, 1—unknown, 1—worms, 1.

Under 5 years, 35—between 5 and 20 years, 4—between 20 and 40 years, 22—between 40 and 60 years, 9—over 60 years, 6. Americans, 39; foreigners and children of foreigners, 37.

Massachusetts Medical Society.—At the annual meeting of the Massachusetts Medical Society, the following gentlemen were chosen Counsellors for the ensuing year:—

Barnstable Co.—Drs. John Harpur, E. W. Carpenter, George Shove, Thomas P. Jackson.

Berkshire Co.—Drs. Royal Fowler, Henry H. Child, Asa G. Welch, Selden Jennings.

Bristol District Soc.—Drs. Ira Lamson, Benoni Carpenter, Joseph Hatch.

Bristol Co.—Drs. Caleb Swan, Benoni Carpenter, Johnson Gardner.

Dukes Co.—Dr. Clement F. Shiverick.

Essex North District.—Drs. Henry C. Perkins, D. Dana, Rufus Longley, S. Johnson.

Essex South District.—Drs. A. L. Peirson, George Choate, Asa Story, Abraham Gould, Samuel Johnson, Ebenezer Hunt, Josiah Lamson, Ebenezer S. Phelps.

Franklin Co.—Drs. Stephen W. Williams, James Deane, Geo. W. Hamilton.

Hampden Co.—Drs. Jesse W. Rice, Nathan Adams, Cyrus Bell.

Hampshire Co.—Drs. Edward G. Ufford, Addison L Peck, Daniel Thompson, E. C. Richardson.

Middlesex Co.—Drs. Zadoc Howe, Anson Hooker, Morrill Wyman, Simon Whitney, Jonathan W. Bemis, Horatio Adams, Luther V. Bell, Charles F. Chaplin, Hiram Hosmer, T. M. Whittemore.

Middle District Medical So.—Drs. J. C. Dalton, J. P. Jewett, A. H. Brown, David Wells, E. Huntington, A. B. Bancroft, N. B. Edwards, Josiah Bartlett.

Nantucket Co.—Dr. Elisha P. Fearing.

Norfolk Co.—Drs. Ebenezer Stone, Edward Jarvis, Appleton Howe, Jonathan Ware, Henry Bartlett, Ebenezer Woodward, Simeon Tucker, Stephen Salisbury, Danforth P. Dwight.

Plymouth Co.—Drs. Ezekiel Thaxter, Winslow Warren, Paul L. Nichols.

Suffolk Co.—Drs. John Ware, George C. Shattuck, Jacob Bigelow, George Hayward, Z. B. Adams, S. D. Townsend, John Homans, Edward Reynolds, John Jeffries, J. C. Hayden, D. H. Storer, Samuel Morrill, Charles G. Putnam, A. A. Watson, M. S. Perry, Ezra Palmer, Jr., Daniel Harwood, A. A. Gould, Henry Dyer, C. H. Stedman, J. B. Gregerson, J. B. S. Jackson, George Bartlett, John Odin, N. B. Shurtleff, Charles Gordon, Henry I. Bowditch, Henry G. Clark, Charles Chase.

Southern District Medical So.—Drs. Andrew Mackie, W. H. A. Creary, Paul Spooner, Walter L. Ellis, H. Lucas.

Worcester Co.—Drs. Edward Flint, Charles W. Wilder, Benjamin Pond, John Green, Benj. P. Heywood, John G. Metcalf, Thomas R. Boutelle, Charles M. Fay, P. Tendall, William Workman, James W. Robbins.

Meeting of the Counsellors.—At a meeting of the Counsellors, held at 10 A. M., Thursday May 30, the following were chosen officers for the ensuing year:—

Dr. John Ware, Boston, *President.* Dr. Henry I. Bowditch, *Rec. Secretary.*
" A. Mackie, N. Bedford, *Vice P.* " Abraham A. Watson, *Librarian.*
" Chas. G. Putnam, *Cor. Sec'ry.* " A. A. Gould, *Treasurer.*

Censors 1st Medical District, and for the Society at large.—Drs. George W. Otis, Alexander Thomas, J. B. S. Jackson, Samuel Morrill, John Flint.

Censors 2d Medical District.—Drs. B. F. Heywood, William Workman, Benj. Pond, J. Sargent, J. G. Metcalf.

Censors 3d Medical District.—Drs. D. Bemis, J. D. Brooks, D. Thompson, E. G. Gifford, James Deane.

Censors 4th Medical District.—Drs. H. H. Childs, A. G. Welch, Robert W thington, N. S. Babbitt, Corydon Guiteau.

Censors 5th Medical District.—Drs. Julius S. Mayhew, Henry Willard, Joh Perkins, Elijah Colby, Perez F. Doggett.

Censors 6th Medical District.—Drs. Aaron Cornish, E. W. Carpenter, T. P. Jackson, J. Leonard, G. Atwood.

Committee on Publications.—Drs. J. Jeffries, Charles E. Ware, S. Parkman.

Committee on Resignations.—Drs. George W. Otis, A. A. Gould, D. H. Storer.

Dr. D. H. Storer was chosen to deliver the next Annual Address.

Attest, HENRY I. BOWDITCH, *Recording Secretary.*